

REMARKS

Favorable reconsideration of this application in light of the following discussion is respectfully requested.

Claims 1-20 are presently active in this case. Claims 21-36 have been canceled without prejudice or disclaimer.

In the outstanding Official Action, Claims 1-20 and 36 were rejected under 35 U.S.C. 103(a) as being unpatentable over the '549 Tejima et al. reference (JP 9-248549) in view of the Bassereau reference (U.S. Patent No. 2,446,403). For the reasons discussed below, the Applicants respectfully request the withdrawal of the obviousness rejection.

The basic requirements for establishing a *prima facie* case of obviousness as set forth in MPEP 2143 include (1) there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings, (2) there must be a reasonable expectation of success, and (3) the reference (or references when combined) must teach or suggest all of the claim limitations. The Applicants respectfully submit that a *prima facie* case of obviousness cannot be established in the present case because the references, either when taken singularly or in combination, fail to teach or suggest all of the claim limitations recited in independent Claim 1 of the present application, and because no motivation exists to modify the combined references to arrive at the claimed invention.

Claim 1 of the present application recites a treatment apparatus comprising a first hermetic chamber having a first opening, and a tube capable of inserting into the first

opening. The tube has a second opening on a side facing the first hermetic chamber and a third opening on the tube. The treatment apparatus further comprises a first hermetic door, placed outside the first hermetic chamber, capable of opening and closing the first opening. The first hermetic door is positioned between the second opening and the third opening such that the first hermetic door is shielded from the first hermetic chamber by the tube when insertion of the tube into the first opening is completed.

The Applicants respectfully submit that neither of the cited references singularly or in combination disclose a first hermetic door that is positioned between the second opening and the third opening such that the first hermetic door is shielded from the first hermetic chamber by the tube when insertion of the tube into the first opening is completed, as recited in Claim 1 of the present application.

The outstanding Official Action notes on page 2 that the '549 Tejima et al. reference is silent as to an apparatus that comprises a tube capable of inserting into a first opening of a first hermetic chamber such that a door for the first opening is shielded from the first hermetic chamber by the tube when the tube is inserted into the first opening, wherein the tube comprises a second opening on a side facing the first hermetic chamber and a third opening on an area opposite the second opening.

The outstanding Official Action further notes that "the collective teaching of Tejima and Bassereau is silent as to the first hermetic door being positioned between the second and third openings of the tube when the insertion of the tube into the first opening is *completed*. In contrast, Bassereau illustrates the door 9 being located beyond the third opening 4c of the

tube 4a when the insertion of the tube into the first opening 2a is completed (see FIG. 1).”

(Pages 3-4 of the Official Action.)

Thus, the Applicants note that the Official Action effectively admits that the cited combination of references fails to establish a *prima facie* case of obviousness as set forth in MPEP 2143, since the Official Action expressly acknowledges that the cited references, either when taken singularly or in combination, fail to disclose all of the limitations expressly recited in Claim 1 of the present application, which is a requirement for establishing *prima facie* obviousness. As noted in MPEP 2143.03, “[t]o establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art.” Accordingly, for at least this reason, the Applicants respectfully request the withdrawal of the obviousness rejection of Claim 1.

The Official Action surmises on page 4 that the difference between the location or arrangement of parts in the claimed invention and the inventions in the cited reference “merely involves routine skill in the art, and one of ordinary skill in the art would have realized to locate the first hermetic door at such a location ... in order to minimize the exposure of the door to deterioration by the vapors and metallic deposits, as suggested by Bassereau.” However, MPEP 2143.01 clearly indicates with regard to the motivation issue that (1) the fact that references can be modified is not sufficient to establish *prima facie* obviousness, and (2) the fact that the claimed invention is within the capabilities of one of ordinary skill in the art is not sufficient by itself to establish *prima facie* obviousness. The Official Action is *using the Bassereau reference to provide the motivation* to modify that

reference when combined with the '549 Tejima reference to include a feature (namely, the orientation of the first hermetic door with respect to the second and third openings), *when the Bassereau reference never teaches or even suggests such a feature*. This interpretation begs the question that, if it would have been advantageous based on the teachings of the Bassereau reference to modify the structure described in the Bassereau reference to include the claimed features of the present invention, then why did the Bassereau reference not include these features? In fact, the Bassereau reference never teaches or even suggests modifying the teachings of the Bassereau reference to include the orientation of the first hermetic door with respect to the second and third openings as recited in Claim 1 of the present application.

The Official Action suggests that the rearrangement of parts involves only routine skill in the art and requires a showing of unexpected results in order to be patentable; however, no such requirement is present in U.S. patent law. As noted in MPEP 2144.04 VI.C., "[t]he mere fact that a worker in the art could rearrange the parts of the reference device to meet the terms of the claims on appeal is not by itself sufficient to support a finding of obviousness. The prior art must provide a motivation or reason for the worker in the art, without the benefit of the appellant's specification, to make the necessary changes in the reference device.'" No such motivation is present in either of the cited references.

The orientation of the first hermetic door with respect to the second and third openings as recited in Claim 1 of the present application is not a mere aesthetic design choice, but rather provides structural benefits not contemplated by the cited references. The Official Action suggests that the statement in the Bassereau reference that the sealing means

is *preferably* placed beyond the range of the vapors and is not exposed to deterioration by these vapors and metallic deposits provides the motivation needed to modify the Bassereau invention to include the features of the present application. However, the Applicants note that the Bassereau describes an invention that presumably achieves such goals without the need for any modifications. Additionally, the Applicants note that the Bassereau reference describes an invention that utilizes packing seals (11) to prevent the vapors from reaching the upper portion of the closure plate (9) when the plate (9) is in the upper position (9a). However, in such a configuration, the packings (11) themselves and the lower edge of the plate (9) are exposed to the vapors. To the contrary, the present invention provides a configuration that advantageously prevents vaporized substances from adhering to the hermetic door, and shields a seal portion of the door from heat, thereby protecting the seal portion and thus providing an improvement in hermetic sealing capability. (See discussion on page 92, lines 1-7, of the present application by way of illustration.) No such teaching is present in the Bassereau reference.

Furthermore, the Applicants note that in the apparatus of the Bassereau reference, the auxiliary chamber (7) and hood (5) are connected by the connecting means (8) and the auxiliary chamber (7) is shielded by the closure (9). The auxiliary chamber (7) can be transferred to another place with a vacuum state via rollers (15). (Col. 4, lines 46-49.) Therefore, the closure (9) is used for maintaining a vacuum state of the auxiliary chamber (7), and not for opening and closing the furnace (1). The Official Action indicates on page 3 that “the hermetic door 9 is subsequently closed (i.e., position 9b), thus maintaining air-tight

conditions for both chambers 1 and 7.” However, when the chamber (7) is disconnected from the hood (5), chamber (1) is not shielded at all. This means that the closure (9) is not intended for closing and opening the furnace (1). To the contrary, the present invention recites a first hermetic door capable of opening and closing a first opening of a first hermetic chamber.

Additionally, since the closure (9) is intended for sealing the auxiliary chamber (7) when the chamber is disconnected from the hood (5) and transferred to another place, there is no motivation in the Bassereau reference to locate the closure at a position closure to the furnace between the features cited for the second and third openings.

The Applicants respectfully submit that the rejection is based on the improper application of hindsight considerations. It is well settled that it is impermissible simply to engage in hindsight reconstruction of the claimed invention, using Applicants' structure as a template and selecting elements from the references to fill in the gaps. *In re Gorman*, 933 F.2d 982, 18 USPQ2d 1885 (Fed. Cir. 1991). Recognizing, after the fact, that a modification of the prior art would provide an improvement or advantage, without suggestion thereof by the prior art, rather than dictating a conclusion of obviousness, is an indication of improper application of hindsight considerations. Simplicity and hindsight are not proper criteria for resolving obviousness. *In re Warner*, 397 F.2d 1011, 154 USPQ 173 (CCPA 1967).

Accordingly, the Applicants respectfully request the withdrawal of the obviousness rejection of Claim 1.

Claims 2-20 are considered allowable for the reasons advanced for Claim 1 from which they depend. These claims are further considered allowable as they recite other

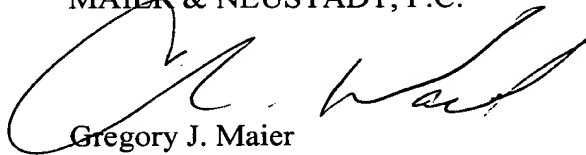
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features of the invention that are neither disclosed nor suggested by the applied references when those features are considered within the context of Claim 1.

Consequently, in view of the above discussion, it is respectfully submitted that the present application is in condition for formal allowance and an early and favorable reconsideration of this application is therefore requested.

Respectfully Submitted,

OBLON, SPIVAK, McCLELLAND,  
MAIER & NEUSTADT, P.C.

A handwritten signature in black ink, appearing to read 'G. J. Maier', is written over the printed name.

Gregory J. Maier  
Registration No. 25,599  
Attorney of Record

Christopher D. Ward  
Registration No. 41,367

Customer Number

**22850**

Tel. (703) 413-3000  
Fax. (703) 413-2220  
(OSMMN 10/01)

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